# Health Indicators and Risk Estimates by Community Health Assessment Geographic Area & Local Health Departments

### Michigan Behavioral Risk Factor Survey 2000-2004

Selected Tables

Division of Epidemiology Services Bureau of Epidemiology Michigan Department of Community Health

#### **Preface**

The Michigan Behavioral Risk Factor Survey (BRFS) is a statewide, random-digit dialed telephone survey of adult residents aged 18 years and older. State-specific, population-based prevalence estimates and confidence interval limits of health risk behaviors, preventive health practices, and chronic conditions are calculated yearly (see annual tables at <a href="http://www.michigan.gov/mdch/0,1607,7-132--12702--,00.html">http://www.michigan.gov/mdch/0,1607,7-132--12702--,00.html</a>). Region-specific and local health department-specific prevalence rates are also computed using five years of combined data and are presented in the following tables.

A combined 2000-2004 Michigan BRFS dataset maximized the available sample size and was used to calculate the prevalence estimates of health risk behaviors, preventive health practices, and chronic conditions by Community Health Assessment Region and Local Health Department (LHD). Estimates are reported for geographic subgroups with a sample size of at least 50 respondents. The 2000-2004 estimates have been weighted to adjust for the probabilities of selection, and a post-stratification weighting factor that adjusts for the distribution of Michigan adults by age, sex, and race at the state level. No additional weighting factors have been computed for the regional or local health department level.

These analyses were performed in SUDAAN, a statistical computing program that was designed for complex sample surveys. In tables of MI BRFS results from previous years, confidence intervals were presented as +/- half of the width of a symmetric confidence interval (1.96 times the standard error). In these 2000-2004 MI BRFS tables, however, asymmetric confidence intervals are included as they are now calculated by SUDAAN (version 9.0).

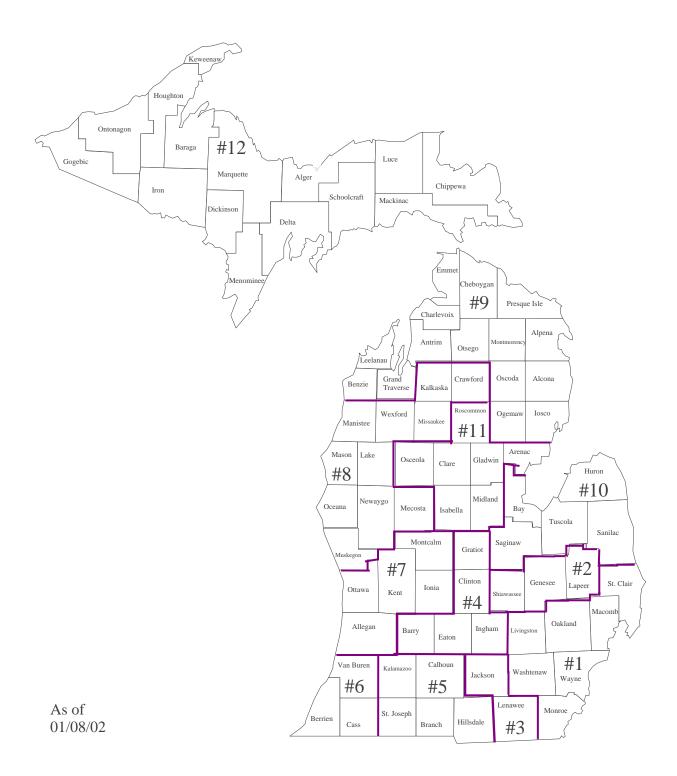
If you have any questions about these data, please contact Michelle L. Cook, MDCH at CookM1@michigan.gov.

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# Community Health Assessment and Improvement Regions State of Michigan



# Local Health Departments State of Michigan





# by Community Health Assessment Region & Local Health Department

2000-2004 Michig	an DKF3	
Geographic Area  General Health, Fair or Poor <sup>a</sup>		
	%	95% Confidence Interval
Michigan Total	14.3	(13.8 – 14.8)
Region 1	14.2	(13.3 – 15.1)
Livingston	6.8	(4.5 – 10.3)
Macomb	14.8	(12.6 – 17.2)
Monroe	11.4	(7.8 – 16.3)
Oakland	11.2	(9.9 – 12.8)
St. Clair	13.2	(9.9 – 17.6)
Washtenaw	7.6	(5.6 – 10.4)
City of Detroit	21.8	(19.3 – 24.6)
Wayne exc. Detroit	14.5	(12.7 – 16.5)
Region 2	14.7	(12.5 – 17.2)
Genesee	14.8	(12.1 – 17.9)
Lapeer	12.5	(8.2 – 18.7)
Shiawassee	17.0	(11.7 – 24.1)
Region 3	15.6	(12.4 – 19.4)
Jackson	17.5	(13.4 – 22.5)
Lenawee	12.7	(8.2 – 19.2)
Region 4	11.7	(10.0 – 13.7)
Barry-Eaton	12.7	(9.5 – 16.8)
Mid-Michigan <sup>b</sup>	16.4	(13.0 - 20.4)
Ingham	10.9	(8.7 – 13.6)
Region 5	16.1	(13.8 – 18.7)
Branch-Hillsdale-St.Joseph	17.9	(13.7 – 23.1)
Calhoun	18.3	(13.9 – 23.8)
Kalamazoo	13.3	(10.3 – 17.0)
Region 6	13.6	(11.0 – 16.7)
Van Buren-Cass	14.6	(10.8 – 19.4)
Berrien	12.7	(9.3 – 17.1)



Table 1 Cont'd			
Geographic Area	General Health, Fair or Poor <sup>a</sup>		
	%	95% Confidence Interval	
Michigan Total	14.3	(13.8 – 14.8)	
Region 7	11.4	(10.2 – 12.8)	
Allegan	9.2	(6.3 – 13.2)	
Ionia	18.3	(11.9 – 27.1)	
Kent	10.8	(9.3 – 12.5)	
Mid-Michigan <sup>b</sup>	16.4	(13.0 – 20.4)	
Ottawa	8.2	(6.1 – 11.1)	
Region 8	15.1	(12.8 – 17.7)	
District #10	17.0	(14.0 – 20.4)	
Muskegon	12.2	(9.0 – 16.5)	
Region 9	15.4	(13.2 – 17.9)	
District #2	19.8	(14.8 – 26.0)	
District #4	19.9	(14.8 – 26.3)	
Northwest Michigan	15.8	(11.8 – 20.9)	
Benzie-Leelanau	8.0	(4.0 – 15.3)	
Grand Traverse	9.6	(6.1 – 14.8)	
Region 10	16.5	(14.1 – 19.2)	
Bay	16.5	(11.8 – 22.5)	
Huron	14.5	(8.5 - 23.7)	
Saginaw	17.5	(13.9 – 21.9)	
Sanilac	18.7	(11.6 – 28.8)	
Tuscola	13.3	(8.5 - 20.4)	
Region 11	16.4	(13.8 – 19.5)	
Central Michigan	18.8	(15.3 – 22.9)	
Midland	11.2	(8.0 – 15.4)	
Region 12	17.1	(14.5 – 20.1)	
Luce-Mackinac-Alger-Schoolcraft	16.4	(10.1 – 25.4)	
Western Upper Peninsula	19.2	(13.6 – 26.4)	
Delta-Menominee	15.8	(10.5 – 23.1)	
Chippewa	26.3	(17.3 – 37.7)	
Dickinson-Iron	16.5	(10.5 – 25.1)	
Marquette	11.7	(7.7 – 17.5)	

<sup>&</sup>lt;sup>a</sup> The proportion who reported that their health, in general, was either fair or poor. b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



2000-2004 Michigan BRFS					
Geographic Area	No Hea	No Health Care Coverage <sup>a</sup>			
	% 95% Confider Interval				
Michigan Total	12.5	(11.9 – 13.2)			
Region 1	11.5	(10.5 – 12.5)			
Livingston	8.8	(5.5 - 13.8)			
Macomb	11.6	(9.3 - 14.5)			
Monroe	8.1	(4.5 - 14.2)			
Oakland	7.0	(5.6 - 8.8)			
St. Clair	14.4	(10.0 - 20.3)			
Washtenaw	9.2	(6.5 - 12.8)			
City of Detroit	18.4	(15.6 - 21.6)			
Wayne exc. Detroit	11.9	(9.9 - 14.3)			
Region 2	12.4	(10.0 – 15.3)			
Genesee	14.6	(11.5 – 18.4)			
Lapeer	6.2	(3.2 - 11.8)			
Shiawassee	7.8	(3.8 - 15.3)			
Region 3	14.3	(10.5 – 19.1)			
Jackson	14.3	(9.8 - 20.5)			
Lenawee	14.2	(8.4 - 22.8)			
Region 4	10.1	(8.1 – 12.5)			
Barry-Eaton	9.2	(5.8 - 14.3)			
Mid-Michigan <sup>b</sup>	8.6	(6.0 - 12.4)			
Ingham	10.5	(7.7 - 14.2)			
Region 5	15.6	(12.8 – 18.8)			
Branch-Hillsdale-St.Joseph	18.0	(12.9 - 24.4)			
Calhoun	20.4	(14.6 - 27.8)			
Kalamazoo	11.0	(7.7 – 15.4)			
Region 6	14.3	(10.8 – 18.8)			
Van Buren-Cass	12.9	(8.1 - 19.8)			
Berrien	15.4	(10.7 - 21.7)			

Table 2 Cont'd				
Geographic Area No Health Care Coverage <sup>a</sup>				
	% 95% Confidence			
Michigan Total	12.5	(11.9 – 13.2)		
Region 7	10.5	(9.0 – 12.2)		
Allegan	16.9	(11.6 – 24.0)		
Ionia	11.9	(6.4 - 20.9)		
Kent	10.5	(8.6 – 12.9)		
Mid-Michigan <sup>b</sup>	8.6	(6.0 - 12.4)		
Ottawa	8.7	(5.9 – 12.6)		
Region 8	16.2	(13.2 – 19.6)		
District #10	14.3	(11.1 – 18.3)		
Muskegon	18.9	(13.8 – 25.4)		
Region 9	16.6	(13.5 – 20.1)		
District #2	19.6	(13.3 – 27.9)		
District #4	16.8	(10.8 – 25.2)		
Northwest Michigan	19.5	(13.3 - 27.6)		
Benzie-Leelanau	6.0	(2.6 – 13.5)		
Grand Traverse	14.4	(9.4 - 21.7)		
Region 10	10.6	(8.3 – 13.5)		
Bay	10.2	(5.7 – 17.4)		
Huron	11.8	(5.2 - 24.6)		
Saginaw	10.7	(7.4 – 15.1)		
Sanilac	14.7	(7.6 - 26.7)		
Tuscola	7.9	(3.8 – 15.5)		
Region 11	14.6	(11.5 – 18.4)		
Central Michigan	17.6	(13.4 – 22.7)		
Midland	8.3	(4.9 – 14.0)		
Region 12	19.3	(15.7 – 23.6)		
Luce-Mackinac-Alger-Schoolcraft	27.2	(17.4 – 39.9)		
Western Upper Peninsula	20.9	(13.7 – 30.6)		
Delta-Menominee	13.3	(7.9 – 21.5)		
Chippewa	25.5	(15.5 – 39.0)		
Dickinson-Iron	19.1	(9.5 - 34.5)		
Marquette	14.6	(7.3 - 27.0)		

<sup>&</sup>lt;sup>a</sup> Among those aged 18-64 years, the proportion who reported having no health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare. <sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



#### Table 3: Weight Status

#### by Community Health Assessment Region & Local Health Department

Geographic Area	c	Obese <sup>a</sup>		Overweight <sup>b</sup>		Not Overweight or Obese <sup>c</sup>	
	%	95% Confidence Interval	95% Confidence Interval		%	95% Confidence Interval	
Michigan Total	24.9	(24.2 – 25.6)	36.5	(35.7 – 37.3)	38.6	(37.8 – 39.4)	
Region 1	24.9	(23.8 – 26.1)	35.9	(34.7 – 37.2)	39.2	(37.9 – 40.5)	
Livingston	22.1	(17.3 - 27.7)	37.2	(31.3 - 43.4)	40.8	(34.8 - 47.1)	
Macomb	22.2	(19.5 – 25.1)	37.5	(34.3 - 40.8)	40.4	(37.1 - 43.7)	
Monroe	24.8	(19.6 - 30.9)	37.5	(31.2 - 44.3)	37.7	(31.3 – 44.5)	
Oakland	20.7	(18.7 – 22.8)	36.4	(34.0 - 38.9)	42.9	(40.4 - 45.5)	
St. Clair	25.2	(20.2 - 31.0)	39.9	(33.7 - 46.4)	34.9	(29.3 - 41.0)	
Washtenaw	19.0	(15.6 – 22.9)	34.9	(30.6 - 39.4)	46.2	(41.6 - 50.8)	
City of Detroit	35.7	(32.5 - 39.0)	33.5	(30.4 - 36.7)	30.9	(27.8 - 34.1)	
Wayne exc. Detroit	24.9	(22.6 – 27.4)	34.8	(32.2 - 37.5)	40.3	(37.5 – 43.1)	
Region 2	26.7	(23.8 – 29.8)	38.4	(35.1 – 41.8)	35.0	(31.7 – 38.3)	
Genesee	27.2	(23.8 – 31.0)	37.7	(33.8 - 41.8)	35.1	(31.3 - 39.1)	
Lapeer	23.5	(17.3 – 31.2)	39.1	(31.0 - 47.8)	37.4	(29.1 – 46.5)	
Shiawassee	27.5	(20.4 - 35.9)	41.3	(32.9 - 50.2)	31.3	(23.7 - 39.9)	
Region 3	24.6	(20.8 – 28.9)	36.1	(31.6 – 40.8)	39.3	(34.6 – 44.3)	
Jackson	25.9	(20.9 – 31.6)	35.5	(29.9 - 41.5)	38.6	(32.8 - 44.9)	
Lenawee	22.8	(17.1 – 29.7)	36.9	(29.7 - 44.8)	40.3	(32.7 – 48.4)	
Region 4	24.2	(21.6 – 27.0)	35.7	(32.7 – 38.8)	40.1	(37.0 – 43.3)	
Barry-Eaton	25.5	(20.7 - 31.0)	36.9	(31.4 - 42.8)	37.6	(32.1 – 43.4)	
Mid-Michigan <sup>d</sup>	27.1	(22.7 - 31.9)	35.1	(30.2 - 40.2)	37.9	(32.9 - 43.2)	
Ingham	23.7	(20.1 – 27.7)	34.2	(30.0 - 38.7)	42.1	(37.7 - 46.7)	
Region 5	26.9	(24.0 – 30.1)	37.1	(33.8 – 40.4)	36.0	(32.8 – 39.3)	
Branch-Hillsdale-St.Joseph	33.6	(28.0 - 39.7)	32.2	(27.0 - 37.9)	34.2	(28.8 - 40.0)	
Calhoun	30.0	(24.4 – 36.3)	43.5	(36.9 - 50.4)	26.5	(21.2 – 32.5)	
Kalamazoo	20.0	(16.2 – 24.4)	36.8	(31.9 - 42.0)	43.2	(38.1 – 48.5)	
Region 6	23.7	(20.1 – 27.6)	38.8	(34.5 – 43.4)	37.5	(33.1 – 42.1)	
Van Buren-Cass	23.5	(18.3 – 29.6)	37.6	(31.4 – 44.2)	38.9	(32.5 – 45.8)	
Berrien	23.8	(19.1 – 29.2)	39.9	(33.9 - 46.3)	36.3	(30.4 - 42.7)	



Table 3 Cont'd						
Geographic Area	Obese <sup>a</sup>		Overweight <sup>b</sup>		Not Overweight or Obese <sup>c</sup>	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	24.9	(24.2 – 25.6)	36.5	(35.7 – 37.3)	38.6	(37.8 – 39.4)
Region 7	21.7	(20.0 – 23.6)	36.3	(34.2 – 38.5)	42.0	(39.8 – 44.2)
Allegan	23.1	(18.0 - 29.2)	36.9	(30.5 - 43.7)	40.0	(33.5 – 46.9)
Ionia	23.5	(16.8 – 31.9)	40.1	(31.2 - 49.7)	36.4	(27.8 – 45.9)
Kent	20.7	(18.5 - 23.2)	34.8	(32.1 - 37.6)	44.5	(41.6 – 47.4)
Mid-Michigan <sup>d</sup>	27.1	(22.7 - 31.9)	35.1	(30.2 - 40.2)	37.9	(32.9 - 43.2)
Ottawa	19.1	(15.7 – 23.1)	40.0	(35.3 - 44.9)	40.9	(36.1 – 45.8)
Region 8	25.2	(22.3 – 28.4)	36.7	(33.2 – 40.3)	38.1	(34.6 – 41.7)
District #10	26.3	(22.6 - 30.4)	38.4	(34.1 - 42.9)	35.2	(31.1 – 39.7)
Muskegon	23.5	(18.8 - 28.8)	34.0	(28.4 - 40.2)	42.5	(36.5 – 48.8)
Region 9	26.1	(23.2 – 29.3)	38.7	(35.3 – 42.2)	35.2	(32.0 – 38.6)
District #2	30.1	(23.7 - 37.4)	40.9	(33.4 - 48.9)	29.0	(22.7 – 36.2)
District #4	28.6	(22.3 - 35.9)	38.0	(31.0 - 45.6)	33.4	(26.6 – 40.9)
Northwest Michigan	25.5	(20.1 - 31.7)	37.0	(30.8 - 43.7)	37.5	(31.3 – 44.2)
Benzie-Leelanau	21.5	(14.4 - 30.7)	43.2	(33.3 - 53.6)	35.4	(26.4 – 45.5)
Grand Traverse	22.9	(16.9 - 30.3)	37.4	(30.1 - 45.2)	39.7	(32.5 - 47.4)
Region 10	28.6	(25.4 – 32.0)	35.3	(31.9 – 38.8)	36.2	(32.7 – 39.8)
Вау	26.4	(20.6 - 33.3)	34.6	(28.3 - 41.6)	38.9	(31.9 – 46.4)
Huron	24.6	(16.6 - 34.9)	36.5	(25.9 - 48.6)	38.9	(27.8 – 51.2)
Saginaw	32.7	(27.5 - 38.3)	33.4	(28.4 - 38.9)	33.9	(28.9 - 39.4)
Sanilac	25.0	(16.6 - 35.8)	37.0	(26.5 - 48.9)	38.0	(27.2 - 50.2)
Tuscola	24.7	(17.3 - 34.0)	40.1	(30.9 - 50.0)	35.2	(26.3 – 45.2)
Region 11	25.6	(22.3 – 29.3)	35.3	(31.4 – 39.4)	39.1	(35.0 – 43.4)
Central Michigan	26.9	(22.6 - 31.7)	36.2	(31.3 - 41.4)	36.9	(31.9 – 42.2)
Midland	22.6	(18.0 - 28.0)	33.1	(27.2 - 39.7)	44.3	(37.6 – 51.1)
Region 12	23.7	(20.5 – 27.3)	39.3	(35.5 – 43.3)	36.9	(33.1 – 41.0)
Luce-Mackinac-Alger-Schoolcraft	36.8	(26.7 – 48.1)	27.7	(19.8 - 37.2)	35.6	(25.9 – 46.6)
Western Upper Peninsula	20.9	(15.1 – 28.2)	40.5	(32.6 - 48.8)	38.7	(30.5 – 47.5)
Delta-Menominee	29.3	(22.1 – 37.7)	39.1	(31.0 - 27.8)	31.6	(24.4 – 39.9)
Chippewa	21.6	(13.5 – 32.9)	48.5	(37.0 - 60.2)	29.9	(20.8 – 41.0)
Dickinson-Iron	13.4	(8.1 – 21.5)	45.4	(34.9 - 56.4)	41.2	(31.2 – 51.9)
Marquette	19.8	(13.8 - 27.7)	37.2	(28.5 - 46.7)	43.0	(33.3 – 53.3)

Note: Body Mass Index (BMI) is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)<sup>2</sup>]. Weight and height are self-reported.

<sup>&</sup>lt;sup>a</sup> The proportion whose BMI ≥ 30.0.

<sup>&</sup>lt;sup>b</sup> The proportion whose BMI ≥ 25.0 and < 30.0.

<sup>&</sup>lt;sup>c</sup> The proportion whose BMI < 25.0.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



2000-2004 MIC	Illyali BKF3			
Geographic Area		No Activity <sup>a</sup>		
	%	95% Confidence Interval		
Michigan Total	23.1	(22.4 – 23.8)		
Region 1	23.4	(22.4 – 24.5)		
Livingston	19.1	(14.6 - 24.6)		
Macomb	23.3	(20.7 - 26.2)		
Monroe	20.4	(15.4 - 26.6)		
Oakland	19.0	(17.1 – 21.1)		
St. Clair	22.2	(17.6 - 27.6)		
Washtenaw	17.2	(14.1 - 21.0)		
City of Detroit	31.7	(28.7 - 34.8)		
Wayne exc. Detroit	24.4	(22.1 - 26.8)		
Region 2	25.6	(22.9 – 28.6)		
Genesee	24.8	(21.6 - 28.3)		
Lapeer	25.0	(18.5 - 32.9)		
Shiawassee	30.9	(23.5 - 39.6)		
Region 3	20.8	(17.3 – 24.8)		
Jackson	18.2	(14.3 - 23.0)		
Lenawee	24.7	(18.7 - 31.8)		
Region 4	20.2	(17.8 – 22.9)		
Barry-Eaton	19.7	(15.5 - 24.7)		
Mid-Michigan <sup>b</sup>	22.0	(18.2 - 26.4)		
Ingham	20.8	(17.3 - 24.9)		
Region 5	23.2	(20.5 – 26.1)		
Branch-Hillsdale-St.Joseph	26.6	(21.8 - 32.1)		
Calhoun	26.5	(21.2 - 32.6)		
Kalamazoo	18.6	(14.9 - 23.0)		
Region 6	24.7	(21.1 – 28.8)		
Van Buren-Cass	25.4	(20.1 - 31.5)		
Berrien	24.2	(19.5 - 29.7)		

Table 4 Cont'd				
Geographic Area	No Activity <sup>a</sup>			
	%	95% Confidence Interval		
Michigan Total	23.1	(22.4 – 23.8)		
Region 7	19.7	(18.0 – 21.4)		
Allegan	20.7	(15.8 – 26.6)		
Ionia	26.2	(18.6 – 35.6)		
Kent	19.4	(17.3 – 21.7)		
Mid-Michigan <sup>b</sup>	22.0	(18.2 - 26.4)		
Ottawa	16.0	(12.9 – 19.7)		
Region 8	24.3	(21.4 – 27.5)		
District #10	23.5	(20.1 – 27.3)		
Muskegon	25.6	(20.5 – 31.4)		
Region 9	23.5	(20.7 – 26.6)		
District #2	29.2	(22.7 - 36.7)		
District #4	27.8	(21.7 – 34.9)		
Northwest Michigan	22.5	(17.4 – 28.5)		
Benzie-Leelanau	16.1	(10.1 – 24.5)		
Grand Traverse	18.5	(13.1 – 25.6)		
Region 10	25.1	(22.1 – 28.4)		
Bay	19.6	(14.5 – 25.9)		
Huron	23.4	(14.9 – 34.7)		
Saginaw	25.9	(21.4 – 30.9)		
Sanilac	32.2	(22.0 - 44.4)		
Tuscola	28.7	(20.3 – 38.9)		
Region 11	24.1	(20.7 – 27.8)		
Central Michigan	27.0	(22.6 – 31.9)		
Midland	17.7	(13.5 – 22.9)		
Region 12	25.1	(21.9 – 28.6)		
Luce-Mackinac-Alger-Schoolcraft	29.9	(21.3 – 40.0)		
Western Upper Peninsula	25.1	(18.5 – 33.0)		
Delta-Menominee	25.5	(18.8 – 33.6)		
Chippewa	21.7	(14.0 – 32.1)		
Dickinson-Iron	28.4	(20.1 – 38.5)		
Marquette	20.6	(14.4 – 28.6)		

<sup>&</sup>lt;sup>a</sup> The proportion who reported that they did not participate in any physical activities, recreation, or exercises in their leisure time (such as running, golf, or walking for exercise) within the past month. <sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.

#### **Table 5: Fruit and Vegetable Consumption** by Community Health Assessment Region & Local Health Department

2000, 2002, 2003 Michigan BRFS

2000, 2002, 2003 Wildingan DN 3				
Geographic Area	<	<5 times/day <sup>a</sup>		
	%	95% Confidence Interval		
Michigan Total	78.1	(77.2 – 78.9)		
Region 1	77.7	(76.3 – 79.1)		
Livingston	74.5	(66.3 - 81.3)		
Macomb	81.1	(77.5 - 84.2)		
Monroe	83.5	(75.6 - 89.3)		
Oakland	75.5	(72.6 - 78.2)		
St. Clair	79.3	(72.1 – 85.1)		
Washtenaw	71.5	(65.9 - 76.4)		
City of Detroit	78.8	(74.8 - 82.3)		
Wayne exc. Detroit	79.3	(76.3 - 82.1)		
Region 2	79.1	(75.1 – 82.5)		
Genesee	78.1	(73.2 - 82.2)		
Lapeer	80.5	(70.0 - 87.3)		
Shiawassee	83.1	(72.7 - 90.1)		
Region 3	76.9	(71.0 – 82.0)		
Jackson	75.2	(67.3 - 81.6)		
Lenawee	79.5	(69.8 - 86.7)		
Region 4	79.6	(76.1 – 82.7)		
Barry-Eaton	79.6	(72.8 - 85.0)		
Mid-Michigan <sup>b</sup>	83.9	(78.5 - 88.1)		
Ingham	79.3	(74.1 – 83.6)		
Region 5	77.0	(72.9 – 80.7)		
Branch-Hillsdale-St.Joseph	81.1	(74.1 – 86.5)		
Calhoun	75.0	(66.9 - 81.7)		
Kalamazoo	75.1	(68.2 - 80.9)		
Region 6	77.3	(72.0 – 81.9)		
Van Buren-Cass	81.0	(73.5 - 86.7)		
Berrien	74.3	(66.4 - 80.9)		

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Table 5 Cont'd					
Geographic Area	<5 times/day <sup>a</sup>				
	%	95% Confidence Interval			
Michigan Total	78.1	(77.2 – 78.9)			
Region 7	79.9	(77.7 – 81.9)			
Allegan	79.8	(71.9 – 85.9)			
Ionia	84.2	(73.8 – 90.9)			
Kent	78.9	(76.1 – 81.4)			
Mid-Michigan <sup>b</sup>	83.9	(78.5 – 88.1)			
Ottawa	78.0	(72.5 – 82.7)			
Region 8	76.0	(71.6 – 79.9)			
District #10	75.0	(69.4 – 79.8)			
Muskegon	77.6	(70.0 - 83.8)			
Region 9	79.0	(75.1 – 82.3)			
District #2	79.2	(69.0 - 86.8)			
District #4	82.6	(74.2 - 88.6)			
Northwest Michigan	79.5	(72.4 – 85.1)			
Benzie-Leelanau	73.7	(60.4 - 83.7)			
Grand Traverse	76.6	(67.4 – 83.8)			
Region 10	81.2	(77.5 – 84.4)			
Вау	83.3	(75.9 – 88.7)			
Huron	70.5	(56.2 – 81.6)			
Saginaw	81.7	(75.7 – 86.6)			
Sanilac	85.7	(74.5 – 92.5)			
Tuscola	80.9	(69.8 – 88.6)			
Region 11	75.9	(70.9 – 80.3)			
Central Michigan	77.7	(71.1 – 83.2)			
Midland	72.0	(64.5 - 78.5)			
Region 12	73.3	(68.2 – 77.8)			
Luce-Mackinac-Alger-Schoolcraft	71.0	(55.9 – 82.6)			
Western Upper Peninsula	71.7	(61.1 – 80.3)			
Delta-Menominee	79.1	(67.8 – 87.1)			
Chippewa	c				
Dickinson-Iron	73.8	(60.2 – 84.0)			
Marquette	66.7	(52.9 – 78.1)			

The proportion whose total reported consumption of fruits (including juice) and vegetables was less than five times per day.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.

<sup>&</sup>lt;sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.



#### **Table 6: High Blood Pressure**

#### by Community Health Assessment Region & Local Health Department

1999, 2001, 2003 Michigan BRFS

Geographic Area	Ever Told High Blood Pressure			
	%	95% Confidence Interval		
Michigan Total	26.5	(25.5 – 27.4)		
Region 1	26.6	(25.1 – 28.1)		
Livingston	14.8	(9.8 - 21.5)		
Macomb	24.8	(21.3 - 28.6)		
Monroe	29.3	(21.4 - 38.6)		
Oakland	25.9	(23.2 - 28.9)		
St. Clair	27.5	(20.7 - 35.4)		
Washtenaw	16.7	(12.8 - 21.5)		
City of Detroit	36.7	(32.5 - 41.2)		
Wayne exc. Detroit	25.1	(22.2 - 28.3)		
Region 2	26.4	(22.8 – 30.4)		
Genesee	28.3	(23.8 - 33.3)		
Lapeer	19.1	(12.2 - 28.5)		
Shiawassee	26.4	(17.5 - 37.7)		
Region 3	26.5	(21.2 – 32.6)		
Jackson	27.6	(20.7 - 35.8)		
Lenawee	25.1	(17.5 - 34.6)		
Region 4	25.7	(22.2 – 29.5)		
Barry-Eaton	29.8	(23.3 - 37.3)		
Mid-Michigan <sup>b</sup>	25.1	(19.7 - 31.3)		
Ingham	24.7	(19.7 - 30.4)		
Region 5	27.5	(23.7 – 31.6)		
Branch-Hillsdale-St.Joseph	31.1	(24.1 - 39.0)		
Calhoun	33.8	(26.0 - 42.5)		
Kalamazoo	21.5	(16.5 - 27.4)		
Region 6	32.4	(26.6 – 38.8)		
Van Buren-Cass	25.5	(18.3 - 34.3)		
Berrien	39.1	(30.7 - 48.3)		



Table 6 Cont'd					
Geographic Area	Ever Told High Blood Pressure				
	%	95% Confidence Interval			
Michigan Total	26.5	(25.5 – 27.4)			
Region 7	23.9	(21.3 – 26.7)			
Allegan	23.1	(16.2 – 31.8)			
Ionia	18.8	(10.8 - 30.6)			
Kent	21.8	(18.4 – 25.6)			
Mid-Michigan <sup>b</sup>	25.1	(19.7 – 31.3)			
Ottawa	28.4	(22.7 - 35.0)			
Region 8	25.1	(21.3 – 29.3)			
District #10	27.5	(22.4 - 33.2)			
Muskegon	21.5	(16.3 - 27.8)			
Region 9	27.2	(23.4 – 31.5)			
District #2	30.2	(22.2 - 39.6)			
District #4	44.9	(35.1 – 55.2)			
Northwest Michigan	22.5	(16.0 - 30.8)			
Benzie-Leelanau	19.3	(10.4 – 32.8)			
Grand Traverse	17.1	(10.8 – 25.9)			
Region 10	30.1	(25.9 – 34.7)			
Bay	34.6	(26.2 - 44.0)			
Huron	c				
Saginaw	27.6	(21.6 – 34.4)			
Sanilac	27.6	(16.5 – 42.3)			
Tuscola	25.6	(15.3 – 39.6)			
Region 11	24.8	(20.2 – 30.1)			
Central Michigan	25.4	(19.8 – 32.0)			
Midland	23.8	(16.5 – 33.0)			
Region 12	27.5	(23.1 – 32.5)			
Luce-Mackinac-Alger-Schoolcraft	31.2	(20.0 - 45.2)			
Western Upper Peninsula	31.1	(21.8 – 42.1)			
Delta-Menominee	24.8	(16.0 – 36.3)			
Chippewa	c				
Dickinson-Iron	24.4	(15.2 – 36.9)			
Marquette	21.6	(12.9 – 34.0)			

The proportion who said that they had ever been told by a health professional that their blood pressure was high.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.

<sup>&</sup>lt;sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.



#### **Table 7: Cholesterol Screening and Awareness**

#### by Community Health Assessment Region & Local Health Department

1999, 2001, 2003 Michigan BRFS

Geographic Area		Checked <sup>a</sup> Ever Told Cholesterol Cholesterol Checked Was High <sup>b</sup> Within Past 5 Years				
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	78.7	(77.7 – 79.7)	34.5	(33.3 – 35.6)	73.8	(72.8 – 74.8)
Region 1	80.2	(78.7 – 81.7)	33.4	(31.7 – 35.2)	76.3	(74.6 – 77.8)
Livingston	76.4	(67.6 – 83.4)	33.1	(24.8 – 42.7)	70.3	(61.4 – 77.8)
Macomb	79.7	(75.5 – 83.4)	38.1	(33.6 – 42.8)	76.1	(71.8 – 79.9)
Monroe	66.0	(55.1 – 75.4)	36.5	(26.8 - 47.5)	64.7	(53.8 – 74.2)
Oakland	83.7	(80.7 – 86.3)	35.4	(32.1 – 38.9)	80.1	(77.0 - 82.8)
St. Clair	79.9	(71.8 – 86.2)	33.8	(25.6 – 43.1)	76.6	(68.2 - 83.3)
Washtenaw	83.7	(78.3 – 88.0)	23.3	(18.2 – 29.2)	74.0	(67.8 - 79.4)
City of Detroit	76.4	(72.3 – 80.1)	31.8	(27.2 - 36.8)	74.5	(70.3 - 78.3)
Wayne exc. Detroit	81.6	(78.2 – 84.6)	33.0	(29.4 – 36.7)	77.0	(73.4 - 80.2)
Region 2	77.9	(73.5 – 81.7)	38.9	(34.1 – 43.9)	74.0	(69.5 – 78.0)
Genesee	78.0	(72.8 – 82.5)	41.6	(35.7 - 47.7)	75.1	(69.8 - 79.8)
Lapeer	69.3	(57.0 – 79.4)	30.4	(20.4 – 42.5)	59.9	(48.0 - 70.8)
Shiawassee	88.4	(78.3 – 94.1)	35.4	(24.1 – 48.7)	86.2	(75.9 - 92.5)
Region 3	80.2	(73.7 – 85.4)	38.9	(32.0 – 46.3)	72.9	(66.1 – 78.8)
Jackson	86.1	(78.1 – 91.6)	39.3	(30.4 - 49.0)	76.7	(67.8 - 83.7)
Lenawee	72.6	(61.7 – 81.3)	38.3	(27.7 – 50.1)	68.1	(57.2 - 77.4)
Region 4	77.9	(73.8 – 81.5)	33.2	(28.9 – 37.8)	72.4	(68.1 – 76.3)
Barry-Eaton	76.6	(68.5 – 83.1)	36.2	(28.2 – 45.1)	70.6	(62.5 - 77.6)
Mid-Michigan <sup>d</sup>	79.4	(72.0 – 85.3)	44.2	(36.5 – 52.2)	74.0	(66.4 - 80.4)
Ingham	76.7	(70.6 – 81.9)	27.8	(22.2 - 34.3)	71.4	(65.0 - 77.1)
Region 5	80.5	(76.5 – 84.0)	28.3	(24.0 – 33.0)	73.3	(69.0 – 77.3)
Branch-Hillsdale-St.Joseph	79.5	(71.6 – 85.6)	32.4	(24.5 – 41.4)	72.7	(64.5 – 79.6)
Calhoun	84.3	(76.8 – 89.7)	27.5	(19.9 – 36.7)	78.0	(69.8 – 84.5)
Kalamazoo	79.2	(72.7 – 84.4)	25.8	(19.7 – 33.0)	71.2	(64.3 – 77.2)
Region 6	77.3	(70.6 – 82.8)	29.8	(23.9 – 36.5)	71.3	(64.6 – 77.3)
Van Buren-Cass	74.0	(63.9 – 82.1)	36.2	(26.8 – 46.9)	70.4	(60.2 - 78.8)
Berrien	80.3	(71.1 – 87.1)	24.2	(17.3 - 32.8)	72.3	(62.9 - 80.0)



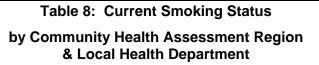
	Table 7 Cont'd						
Geographic Area		esterol Ever hecked <sup>a</sup>		ld Cholesterol as High <sup>b</sup>		terol Checked Past 5 Years <sup>c</sup>	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	
Michigan Total	78.7	(77.7 – 79.7)	34.5	(33.3 – 35.6)	73.8	(72.8 – 74.8)	
Region 7	78.9	(75.8 – 81.6)	34.5	(31.2 – 38.0)	73.2	(70.0 – 76.2)	
Allegan	73.6	(63.8 – 81.5)	31.2	(21.9 – 42.4)	65.1	(55.1 – 74.0)	
Ionia	85.0	(72.5 - 92.4)	26.3	(16.2 – 39.6)	76.2	(62.6 – 86.0)	
Kent	77.8	(73.4 – 81.6)	32.7	(28.2 - 37.5)	72.2	(67.6 - 76.3)	
Mid-Michigan <sup>d</sup>	79.4	(72.0 - 85.3)	44.2	(36.5 – 52.2)	74.0	(66.4 - 80.4)	
Ottawa	84.0	(77.9 - 88.8)	36.6	(29.8 – 44.0)	80.2	(73.7 – 85.4)	
Region 8	73.1	(68.1 – 77.6)	35.8	(30.7 – 41.3)	67.5	(62.4 – 72.3)	
District #10	73.9	(67.5 - 79.4)	39.3	(32.7 - 46.4)	69.6	(63.1 – 75.4)	
Muskegon	71.9	(63.7 – 78.9)	30.5	(22.8 - 39.4)	64.5	(56.1 – 72.0)	
Region 9	79.3	(74.8 – 83.1)	33.8	(29.1 – 38.8)	73.6	(68.9 – 77.9)	
District #2	75.5	(64.5 – 83.9)	41.9	(31.5 – 53.1)	70.2	(59.1 – 79.3)	
District #4	76.7	(66.4 – 84.6)	34.4	(24.5 – 45.8)	70.7	(60.1 – 79.4)	
Northwest Michigan	83.5	(75.2 – 89.4)	29.7	(21.8 – 39.0)	79.2	(70.7 – 85.8)	
Benzie-Leelanau	82.1	(66.2 – 91.5)	e		74.2	(57.1 – 86.1)	
Grand Traverse	78.5	(67.2 – 86.7)	28.8	(19.3 – 40.6)	71.8	(59.9 – 81.3)	
Region 10	78.1	(73.4 – 82.1)	41.7	(36.5 – 47.1)	72.5	(67.7 – 76.9)	
Bay	76.6	(66.7 – 84.2)	44.9	(34.5 – 55.8)	67.6	(57.6 - 76.3)	
Huron	e		e		e		
Saginaw	81.5	(74.3 – 87.0)	40.0	(32.4 - 48.0)	78.0	(70.6 – 84.0)	
Sanilac	69.2	(53.4 – 81.6)	e		66.7	(50.7 – 79.5)	
Tuscola	72.2	(57.3 - 83.4)	e		68.5	(53.6 - 80.3)	
Region 11	73.0	(66.8 – 78.3)	39.3	(33.0 – 46.0)	69.3	(63.1 – 74.9)	
Central Michigan	73.3	(65.7 - 79.7)	42.9	(35.1 – 51.1)	68.4	(60.7 – 75.2)	
Midland	72.3	(61.1 – 81.2)	32.2	(22.4 - 44.0)	71.0	(59.9 - 80.0)	
Region 12	75.8	(70.3 – 80.7)	36.3	(30.7 – 42.3)	69.3	(63.6 – 74.5)	
Luce-Mackinac-Alger-Schoolcraft	79.3	(62.4 – 89.8)	e		74.0	(57.5 - 85.7)	
Western Upper Peninsula	73.4	(61.2 – 82.9)	41.0	(28.9 – 54.2)	68.5	(56.3 - 78.6)	
Delta-Menominee	80.2	(68.2 – 88.5)	35.0	(23.2 – 49.0)	76.5	(64.1 – 85.6)	
Chippewa	e	·	e		e		
Dickinson-Iron	75.3	(60.0 – 86.1)	e		64.6	(49.8 – 77.0)	
Marquette	75.7	(61.3 – 86.0)	20.1	(11.6 – 32.6)	64.9	(50.5 - 76.9)	

Among all respondents, the proportion who reported ever having had their cholesterol checked.

Among those who ever had their blood cholesterol checked, the proportion who had ever been told by a doctor, nurse, or other health professional that their cholesterol was high.

c Among all respondents, the proportion who reported that they have had their blood cholesterol checked within the past five years. The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.

e Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.



2000-2004 Michigan BRFS					
Geographic Area	Current Smoker <sup>a</sup>				
	%	95% Confidence Interval			
Michigan Total	24.6	(23.9 – 25.3)			
Region 1	24.1	(23.0 – 25.2)			
Livingston	20.6	(16.1 – 26.1)			
Macomb	26.2	(23.3 - 29.3)			
Monroe	24.6	(18.8 – 31.5)			
Oakland	20.3	(18.2 – 22.5)			
St. Clair	32.5	(26.9 – 38.7)			
Washtenaw	16.0	(12.8 – 19.8)			
City of Detroit	29.4	(26.5 – 32.5)			
Wayne exc. Detroit	24.7	(22.4 - 27.2)			
Region 2	26.1	(23.2 – 29.3)			
Genesee	25.8	(22.4 - 29.6)			
Lapeer	31.9	(24.3 – 40.5)			
Shiawassee	21.3	(14.8 – 29.7)			
Region 3	24.1	(20.2 – 28.5)			
Jackson	25.9	(20.9 – 31.6)			
Lenawee	21.4	(15.6 – 28.6)			
Region 4	24.5	(21.8 – 27.4)			
Barry-Eaton	27.6	(22.5 - 33.4)			
Mid-Michigan <sup>b</sup>	24.4	(20.1 – 29.2)			
Ingham	23.3	(19.6 – 27.4)			
Region 5	25.4	(22.6 – 28.6)			
Branch-Hillsdale-St.Joseph	29.0	(23.9 - 34.8)			
Calhoun	32.0	(25.9 – 38.7)			
Kalamazoo	18.8	(15.1 – 23.2)			
Region 6	26.5	(22.4 – 30.9)			
Van Buren-Cass	26.5	(20.8 – 33.2)			
Berrien	26.4	(21.0 – 32.6)			

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Table 8 Cont'd				
Geographic Area	Cı	urrent Smoker <sup>a</sup>		
	%	95% Confidence Interval		
Michigan Total	24.6	(23.9 – 25.3)		
Region 7	22.1	(20.3 – 24.1)		
Allegan	27.6	(22.0 - 34.1)		
Ionia	27.2	(19.5 - 36.6)		
Kent	21.5	(19.1 - 24.0)		
Mid-Michigan <sup>b</sup>	24.4	(20.1 - 29.2)		
Ottawa	18.1	(14.3 - 22.5)		
Region 8	28.0	(24.8 – 31.4)		
District #10	26.0	(22.3 - 30.1)		
Muskegon	31.0	(25.6 - 37.0)		
Region 9	27.8	(24.7 – 31.0)		
District #2	31.9	(25.1 - 39.5)		
District #4	29.6	(23.0 - 37.2)		
Northwest Michigan	27.9	(22.2 - 34.4)		
Benzie-Leelanau	14.3	(8.5 - 22.8)		
Grand Traverse	28.1	(21.5 - 35.7)		
Region 10	24.9	(21.8 – 28.2)		
Bay	20.9	(15.3 – 27.7)		
Huron	27.7	(18.0 - 39.9)		
Saginaw	23.8	(19.5 - 28.9)		
Sanilac	35.7	(24.9 - 48.2)		
Tuscola	25.9	(18.5 – 35.1)		
Region 11	27.0	(23.4 – 30.9)		
Central Michigan	29.1	(24.6 - 34.2)		
Midland	22.3	(17.3 - 28.3)		
Region 12	22.5	(19.4 – 26.0)		
Luce-Mackinac-Alger-Schoolcraft	35.6	(25.9 - 46.6)		
Western Upper Peninsula	19.3	(13.8 - 26.4)		
Delta-Menominee	20.9	(14.7 - 28.8)		
Chippewa	25.0	(16.6 - 35.8)		
Dickinson-Iron	23.8	(16.5 - 33.2)		
Marquette	15.3	(9.7 - 23.4)		

<sup>&</sup>lt;sup>a</sup> The proportion who reported that they had ever smoked at least 100 cigarettes in their life and

that they smoke cigarettes now.

b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



## by Community Health Assessment Region & Local Health Department

2000-2004 Michig	2000-2004 Michigan BRFS				
Geographic Area	Ever Told Have Diabetes <sup>a</sup>				
	%	95% Confidence Interval			
Michigan Total	7.6	(7.3 – 8.1)			
Region 1	7.8	(7.1 – 8.4)			
Livingston	6.7	(4.3 - 10.3)			
Macomb	7.1	(5.7 - 8.8)			
Monroe	7.1	(4.6 – 10.9)			
Oakland	6.8	(5.7 – 8.1)			
St. Clair	7.2	(4.7 – 10.7)			
Washtenaw	5.2	(3.7 - 7.3)			
City of Detroit	10.9	(9.2 - 13.0)			
Wayne exc. Detroit	7.8	(6.5 - 9.3)			
Region 2	8.1	(6.5 – 10.0)			
Genesee	8.7	(6.8 – 11.1)			
Lapeer	5.8	(2.9 – 11.3)			
Shiawassee	7.6	(4.3 – 13.0)			
Region 3	10.6	(7.9 – 13.9)			
Jackson	10.8	(7.7 – 15.1)			
Lenawee	10.2	(6.1 – 16.4)			
Region 4	6.2	(5.0 – 7.7)			
Barry-Eaton	5.9	(4.0 - 8.7)			
Mid-Michigan <sup>b</sup>	7.7	(5.5 – 10.7)			
Ingham	6.0	(4.4 - 8.3)			
Region 5	8.7	(7.1 – 10.6)			
Branch-Hillsdale-St.Joseph	9.6	(7.0 – 13.1)			
Calhoun	9.8	(6.7 – 13.9)			
Kalamazoo	7.4	(5.1 – 10.6)			
Region 6	6.9	(5.2 – 9.2)			
Van Buren-Cass	7.8	(5.2 – 11.5)			
Berrien	6.2	(4.0 - 9.5)			

Table 9 Cont'd					
Geographic Area	Ever 1	Fold Have Diabetes			
	%	95% Confidence Interval			
Michigan Total	7.6	(7.3 – 8.1)			
Region 7	6.3	(5.4 – 7.4)			
Allegan	7.5	(4.7 – 11.7)			
Ionia	8.6	(4.3 – 16.4)			
Kent	6.0	(4.9 - 7.3)			
Mid-Michigan <sup>b</sup>	7.7	(5.5 – 10.7)			
Ottawa	4.9	(3.3 - 7.3)			
Region 8	7.9	(6.4 – 9.8)			
District #10	7.6	(5.7 - 10.0)			
Muskegon	8.4	(6.0 – 11.7)			
Region 9	7.7	(6.2 – 9.6)			
District #2	7.5	(4.8 – 11.7)			
District #4	10.7	(7.0 - 16.0)			
Northwest Michigan	6.5	(4.2 - 10.0)			
Benzie-Leelanau	14.2	(8.5 - 22.6)			
Grand Traverse	3.4	(1.5 – 7.5)			
Region 10	6.8	(5.4 – 8.6)			
Bay	6.7	(4.1 – 10.7)			
Huron	4.9	(1.9 – 11.6)			
Saginaw	9.4	(6.8 – 12.7)			
Sanilac	4.3	(2.0 – 9.1)			
Tuscola	2.0	(0.9 - 4.4)			
Region 11	9.0	(7.1 – 11.4)			
Central Michigan	9.2	(6.9 – 12.3)			
Midland	8.6	(5.8 – 12.5)			
Region 12	8.3	(6.6 – 10.5)			
Luce-Mackinac-Alger-Schoolcraft	10.5	(6.0 – 17.5)			
Western Upper Peninsula	10.4	(6.6 – 16.1)			
Delta-Menominee	8.4	(4.7 – 14.6)			
Chippewa	6.2	(2.5 – 14.4)			
Dickinson-Iron	7.3	(3.9 – 13.2)			
Marquette	6.5	(3.5 – 11.7)			

<sup>&</sup>lt;sup>a</sup> The proportion who reported that they had ever been told that they had diabetes. Women who had diabetes only during pregnancy were considered not to have been diagnosed.

<sup>&</sup>lt;sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



#### **Table 10: Alcohol Consumption** by Community Health Assessment Region & Local Health Department

	2001-2004 WIIC	IIIgali BKF3		
Geographic Area	ographic Area Heavy Drinking <sup>a</sup>			ge Drinking <sup>b</sup>
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	5.4	(5.0 – 5.8)	17.4	(16.7 – 18.1)
Region 1	5.3	(4.7 – 6.0)	16.6	(15.6 – 17.8)
Livingston	5.0	(2.7 - 8.9)	17.3	(12.6 – 23.4)
Macomb	7.7	(5.7 – 10.2)	21.5	(18.5 – 24.9)
Monroe	4.8	(2.5 - 9.0)	17.2	(11.8 – 24.3)
Oakland	5.3	(4.2 - 6.7)	15.2	(13.3 – 17.3)
St. Clair	8.5	(5.4 - 13.3)	17.9	(13.2 - 23.8)
Washtenaw	5.6	(3.5 - 8.9)	16.7	(13.1 – 21.2)
City of Detroit	3.2	(2.1 - 4.9)	12.6	(10.3 – 15.2)
Wayne exc. Detroit	5.0	(3.8 - 6.5)	18.0	(15.7 – 20.5)
Region 2	3.9	(2.6 – 5.8)	16.3	(13.6 – 19.4)
Genesee	4.1	(2.6 - 6.4)	15.7	(12.6 – 19.5)
Lapeer	3.6	(1.1 – 11.0)	20.9	(14.1 – 29.9)
Shiawassee	3.3	(1.1 – 9.8)	14.2	(9.0 – 21.7)
Region 3	4.2	(2.2 – 7.6)	17.1	(13.2 – 21.8)
Jackson	4.1	(2.1 - 7.9)	17.7	(13.0 – 23.7)
Lenawee	4.3	(1.4 – 12.7)	16.3	(10.3 – 24.7)
Region 4	6.3	(4.7 – 8.5)	18.8	(16.0 – 21.9)
Barry-Eaton	5.6	(3.1 - 9.8)	18.0	(13.3 – 24.0)
Mid-Michigan <sup>c</sup>	5.8	(3.7 - 9.1)	17.6	(13.4 – 22.7)
Ingham	6.4	(4.1 – 9.9)	20.5	(16.4 – 25.4)
Region 5	6.8	(5.1 – 9.1)	17.9	(15.1 – 21.2)
Branch-Hillsdale-St.Joseph	6.8	(4.2 – 10.8)	16.7	(12.1 – 22.8)
Calhoun	5.9	(3.1 - 10.7)	12.2	(8.1 – 18.0)
Kalamazoo	7.4	(4.7 – 11.5)	22.2	(17.5 – 27.7)
Region 6	6.5	(4.3 – 9.8)	15.6	(12.1 – 20.0)
Van Buren-Cass	10.1	(5.9 – 16.5)	22.2	(16.1 – 29.8)
Berrien	3.7	(1.8 - 7.4)	10.4	(6.9 - 15.5)



	Table	10 Cont'd		
Geographic Area	Hea	avy Drinking <sup>a</sup>	Bin	ge Drinking <sup>b</sup>
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	5.4	(5.0 – 5.8)	17.4	(16.7 – 18.1)
Region 7	3.7	(2.9 – 4.7)	16.7	(15.0 – 18.7)
Allegan	3.0	(1.4 – 6.5)	14.2	(9.6 - 20.6)
Ionia	4.6	(1.8 – 11.3)	10.7	(6.0 – 18.3)
Kent	4.4	(3.3 - 5.9)	18.0	(15.6 – 20.5)
Mid-Michigan <sup>c</sup>	5.8	(3.7 - 9.1)	17.6	(13.4 – 22.7)
Ottawa	2.2	(1.1 - 4.4)	15.6	(11.9 – 20.3)
Region 8	6.4	(4.7 – 8.7)	19.0	(16.0 – 22.4)
District #10	6.5	(4.5 - 9.3)	19.7	(16.0 – 24.1)
Muskegon	6.2	(3.4 - 11.0)	18.0	(13.3 – 23.8)
Region 9	5.6	(4.0 – 7.7)	18.4	(15.5 – 21.8)
District #2	7.9	(4.5 – 13.5)	21.4	(15.3 – 29.1)
District #4	7.4	(3.9 - 13.8)	20.0	(13.6 – 28.5)
Northwest Michigan	4.8	(2.2 - 10.3)	18.3	(12.9 – 25.3)
Benzie-Leelanau	4.4	(1.8 - 10.4)	13.9	(7.6 - 23.8)
Grand Traverse	2.8	(1.0 - 7.4)	16.3	(10.7 - 23.9)
Region 10	6.6	(4.7 – 9.1)	17.5	(14.6 – 20.9)
Вау	5.5	(2.6 – 11.2)	22.5	(16.4 - 30.0)
Huron	5.9	(1.6 - 19.4)	24.0	(13.9 – 38.0)
Saginaw	6.1	(3.8 - 9.7)	13.6	(9.9 - 18.3)
Sanilac	7.6	(2.8 - 18.8)	20.0	(11.4 – 32.5)
Tuscola	9.6	(4.1 - 20.8)	15.9	(9.0 - 26.6)
Region 11	4.6	(2.9 – 7.2)	20.5	(16.9 – 24.7)
Central Michigan	4.8	(2.6 - 8.6)	22.4	(17.8 - 27.8)
Midland	4.2	(2.4 - 7.0)	16.6	(11.9 – 22.9)
Region 12	7.7	(5.7 – 10.3)	21.8	(18.4 – 25.7)
Luce-Mackinac-Alger-Schoolcraft	5.0	(2.2 – 11.2)	19.9	(11.6 – 32.0)
Western Upper Peninsula	7.3	(3.7 - 13.9)	19.6	(13.5 – 27.7)
Delta-Menominee	8.0	(4.3 – 14.4)	22.9	(16.0 – 31.5)
Chippewa	10.8	(4.9 - 22.4)	26.3	(16.3 – 39.6)
Dickinson-Iron	5.2	(1.6 – 16.0)	13.4	(7.4 - 23.0)
Marquette	9.8	(5.4 – 17.1)	27.6	(19.2 – 38.0)

The proportion who reported that they consumed 60 or more alcoholic drinks in the past month.

The proportion who reported consuming five or more drinks on one occasion at least once in the past month.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



Table 11: Immunizations Among Adults Aged 65 Years and Older by Community Health Assessment Region

2001-2004 Michigan BRFS

Geographic Area No Flu Shot in Pas		hot in Past Year <sup>a</sup>	Never Had	a Pneumonia Shot <sup>b</sup>
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	65.8	(64.0 – 67.5)	61.0	(59.1 – 62.7)
Region 1	62.9	(59.9 – 65.9)	59.3	(56.2 – 62.4)
Region 2	65.4	(57.2 – 72.7)	56.2	(47.9 – 64.1)
Region 3	70.3	(60.7 – 78.4)	61.0	(51.1 – 70.0)
Region 4	69.4	(62.0 – 75.9)	61.3	(53.7 – 68.4)
Region 5	69.5	(62.8 – 75.5)	62.9	(55.9 – 69.5)
Region 6	60.1	(50.2 – 69.2)	55.8	(45.9 – 65.2)
Region 7	70.4	(65.7 – 74.7)	66.1	(61.1 – 70.8)
Region 8	64.8	(56.5 – 72.3)	65.5	(57.2 – 72.9)
Region 9	73.3	(67.2 – 78.7)	67.1	(60.5 – 73.1)
Region 10	62.3	(54.5 – 69.5)	53.3	(45.5 – 61.0)
Region 11	68.8	(60.2 – 76.3)	67.0	(58.4 – 74.6)
Region 12	62.5	(54.3 – 70.1)	59.0	(50.6 – 66.8)

Note: Sample sizes were too small (< 50) to compute prevalence estimates by local health departments. Among those aged 65 years and older, ...

a...the proportion who reported that they had not had a flu shot in the past year.
b...the proportion who reported that had never had a pneumonia shot.



#### Table 12: HIV Testing Among Those Aged 18-64 Years by Community Health Assessment Region & Local Health Department

2000-2004 Milchigan Bixt 3				
Geographic Area Ever Had an HIV				
	%	95% Confidence Interval		
Michigan Total	45.8	(44.8 – 46.7)		
Region 1	49.4	(47.9 – 50.8)		
Livingston	43.3	(36.7 - 50.2)		
Macomb	47.8	(44.1 – 51.5)		
Monroe	42.2	(34.9 - 49.8)		
Oakland	46.2	(43.4 - 49.2)		
St. Clair	43.5	(36.8 - 50.4)		
Washtenaw	47.3	(42.4 - 52.3)		
City of Detroit	62.0	(58.3 - 65.5)		
Wayne exc. Detroit	47.3	(44.2 - 50.5)		
Region 2	46.6	(42.9 – 50.5)		
Genesee	47.3	(42.8 - 51.9)		
Lapeer	40.0	(31.2 - 49.5)		
Shiawassee	51.2	(41.1 – 61.1)		
Region 3	40.7	(35.3 – 46.4)		
Jackson	45.0	(37.9 - 52.3)		
Lenawee	35.1	(27.0 - 44.1)		
Region 4	46.1	(42.6 – 49.7)		
Barry-Eaton	47.2	(40.5 - 54.1)		
Mid-Michigan <sup>b</sup>	41.5	(35.8 - 47.5)		
Ingham	46.4	(41.5 - 51.4)		
Region 5	47.0	(43.2 – 50.9)		
Branch-Hillsdale-St.Joseph	42.4	(35.7 - 49.3)		
Calhoun	49.7	(41.9 – 57.5)		
Kalamazoo	49.0	(43.1 – 55.0)		
Region 6	49.1	(43.8 – 54.4)		
Van Buren-Cass	56.2	(48.2 - 63.9)		
Berrien	43.7	(36.8 - 50.8)		

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Table 12 Cont'd			
Geographic Area	Ever	Had an HIV Test <sup>a</sup>	
	%	95% Confidence Interval	
Michigan Total	45.8	(44.8 – 46.7)	
Region 7	40.3	(37.9 – 42.7)	
Allegan	38.5	(31.4 – 46.2)	
Ionia	37.5	(27.7 – 48.5)	
Kent	43.5	(40.3 - 46.7)	
Mid-Michigan <sup>b</sup>	41.5	(35.8 - 47.5)	
Ottawa	35.4	(30.4 - 40.8)	
Region 8	41.4	(37.4 – 45.5)	
District #10	38.8	(34.0 - 43.9)	
Muskegon	45.2	(38.6 – 52.0)	
Region 9	46.0	(41.9 – 50.1)	
District #2	37.0	(28.4 – 46.7)	
District #4	38.8	(30.5 - 47.7)	
Northwest Michigan	50.3	(42.6 – 58.0)	
Benzie-Leelanau	46.6	(34.4 - 59.2)	
Grand Traverse	53.8	(45.3 – 62.0)	
Region 10	39.6	(35.6 – 43.8)	
Bay	40.7	(32.8 - 49.2)	
Huron	25.9	(16.2 – 38.7)	
Saginaw	43.4	(37.2 - 49.8)	
Sanilac	45.5	(31.6 – 60.2)	
Tuscola	31.9	(22.9 - 42.5)	
Region 11	37.3	(32.7 – 42.1)	
Central Michigan	37.8	(32.0 - 44.0)	
Midland	36.0	(29.3 - 43.4)	
Region 12	40.8	(36.4 – 45.3)	
Luce-Mackinac-Alger-Schoolcraft	44.7	(33.2 - 56.8)	
Western Upper Peninsula	37.3	(28.5 – 47.1)	
Delta-Menominee	41.3	(32.3 - 50.9)	
Chippewa	46.8	(34.1 – 59.9)	
Dickinson-Iron	45.0	(32.3 – 58.5)	
Marquette	34.3	(25.0 – 44.9)	

<sup>&</sup>lt;sup>a</sup> Among those aged 18-64 years, the proportion who reported that they had ever been tested for HIV, apart from tests that were part of a blood donation.

b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton

and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



#### Table 13: Asthma by Community Health Assessment Region & Local Health Department

Geographic Area	Ever To	Ever Told Have Asthma <sup>a</sup>		Still Have Asthma <sup>b</sup>	
	%	% 95% Confidence Interval		95% Confidence Interval	
Michigan Total	12.7	(12.2 – 13.2)	8.6	(8.1 – 9.0)	
Region 1	13.8	(12.9 – 14.7)	9.2	(8.4 – 10.0)	
Livingston	11.9	(8.7 – 16.2)	8.7	(5.9 – 12.7)	
Macomb	13.6	(11.4 – 16.1)	8.7	(7.0 – 10.8)	
Monroe	10.5	(7.1 – 15.3)	9.1	(6.0 – 13.6)	
Oakland	14.1	(12.4 – 16.0)	9.7	(8.2 – 11.4)	
St. Clair	11.0	(7.5 - 15.8)	7.2	(4.4 – 11.6)	
Washtenaw	15.8	(12.7 – 19.4)	10.7	(8.1 – 13.9)	
City of Detroit	14.5	(12.4 – 17.0)	9.3	(7.5 – 11.4)	
Wayne exc. Detroit	13.8	(11.9 – 15.9)	8.9	(7.4 – 10.6)	
Region 2	13.4	(11.2 – 16.0)	8.5	(6.8 – 10.6)	
Genesee	13.3	(10.7 – 16.3)	8.8	(6.8 – 11.3)	
Lapeer	13.7	(8.5 – 21.6)	7.4	(3.9 - 13.4)	
Shiawassee	13.9	(8.8 – 21.3)	8.5	(4.5 – 15.3)	
Region 3	12.6	(9.7 – 16.2)	10.7	(8.1 – 14.1)	
Jackson	12.5	(9.1 – 17.0)	10.9	(7.7 – 15.3)	
Lenawee	12.6	(8.1 – 19.2)	10.5	(6.5 – 16.6)	
Region 4	13.5	(11.5 – 15.8)	9.8	(8.0 – 11.8)	
Barry-Eaton	12.1	(8.6 – 16.7)	9.4	(6.4 – 13.7)	
Mid-Michigan <sup>c</sup>	11.4	(8.5 – 15.0)	8.8	(6.3 – 12.2)	
Ingham	15.2	(12.2 – 18.7)	10.6	(8.1 – 13.8)	
Region 5	11.0	(9.2 – 13.2)	7.5	(6.0 – 9.3)	
Branch-Hillsdale-St.Joseph	11.5	(8.4 – 15.5)	7.6	(5.1 – 11.2)	
Calhoun	10.2	(7.1 – 14.5)	6.4	(4.2 - 9.6)	
Kalamazoo	11.2	(8.4 – 14.8)	7.9	(5.6 – 11.1)	
Region 6	9.6	(7.3 – 12.5)	5.6	(4.0 – 7.8)	
Van Buren-Cass	9.2	(5.8 – 14.2)	5.0	(2.8 - 8.6)	
Berrien	9.9	(7.0 - 13.8)	6.1	(4.0 - 9.3)	



Table 13 Cont'd					
Geographic Area	Ever Tol	d Have Asthma <sup>a</sup>	Still I	Have Asthma <sup>b</sup>	
	%	% 95% Confidence Interval		95% Confidence Interval	
Michigan Total	12.7	(12.2 – 13.2)	8.6	(8.1 – 9.0)	
Region 7	11.1	(9.7 – 12.5)	7.7	(6.6 – 9.0)	
Allegan	8.0	(5.2 – 12.3)	6.0	(3.5 – 10.0)	
Ionia	11.9	(6.7 - 20.3)	8.2	(3.9 - 16.3)	
Kent	11.3	(9.6 – 13.2)	7.2	(5.9 - 8.7)	
Mid-Michigan <sup>c</sup>	11.4	(8.5 – 15.0)	8.8	(6.3 – 12.2)	
Ottawa	11.8	(8.8 – 15.7)	8.9	(6.3 – 12.5)	
Region 8	11.6	(9.6 – 14.0)	7.2	(5.7 – 9.0)	
District #10	12.5	(10.0 – 15.5)	8.9	(6.9 – 11.5)	
Muskegon	10.3	(7.3 – 14.3)	4.5	(2.8 - 7.1)	
Region 9	13.7	(11.5 – 16.3)	9.4	(7.6 – 11.6)	
District #2	18.6	(13.0 – 26.0)	11.2	(7.1 – 17.1)	
District #4	11.6	(7.7 – 17.2)	9.2	(5.8 – 14.3)	
Northwest Michigan	13.8	(10.0 – 18.8)	9.5	(6.4 – 13.9)	
Benzie-Leelanau	11.2	(6.1 – 19.6)	8.8	(4.4 – 17.2)	
Grand Traverse	12.2	(8.0 – 18.1)	7.9	(4.6 – 13.1)	
Region 10	12.8	(10.5 – 15.4)	8.4	(6.5 – 10.7)	
Bay	13.2	(9.4 – 18.3)	8.5	(5.6 – 12.8)	
Huron	16.5	(8.9 - 28.4)	14.2	(7.1 – 26.3)	
Saginaw	9.4	(6.7 – 13.1)	5.8	(3.7 - 8.9)	
Sanilac	10.0	(5.0 – 19.1)	5.7	(2.2 – 13.8)	
Tuscola	22.0	(14.4 - 32.0)	14.1	(8.0 - 23.6)	
Region 11	12.4	(10.0 – 15.2)	8.6	(6.6 – 11.1)	
Central Michigan	12.3	(9.4 – 16.0)	8.4	(6.0 – 11.7)	
Midland	12.5	(9.0 – 17.1)	8.9	(5.9 – 13.2)	
Region 12	10.0	(8.0 – 12.6)	7.0	(5.4 – 9.1)	
Luce-Mackinac-Alger-Schoolcraft	15.8	(9.6 – 25.1)	11.5	(6.6 – 19.4)	
Western Upper Peninsula	7.7	(4.5 – 12.8)	4.3	(2.1 – 8.6)	
Delta-Menominee	8.8	(5.2 – 14.5)	6.1	(3.2 – 11.5)	
Chippewa	7.6	(3.3 - 16.6)	7.6	(3.3 – 16.6)	
Dickinson-Iron	8.3	(4.4 – 15.2)	6.0	(2.9 – 12.1)	
Marquette	12.2	(7.4 - 19.6)	8.0	(4.5 – 13.6)	

Proportion who reported that they had ever been told they have asthma.

Proportion who reported that they still have asthma.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.



Table 14: Colorectal Cancer Screening Among Adults Aged 50 Years and Older by Community Health Assessment Region & Local Health Department

2001, 2002, 2004 Michigan BRFS

Geographic Area		a Blood Stool Test <sup>a</sup>	Had a Blood Stool Test in Past 2 Years <sup>b</sup>	
	%	% 95% Confidence Interval		95% Confidence Interval
Michigan Total	52.4	(51.0 – 53.8)	33.8	(32.5 – 35.2)
Region 1	47.7	(45.4 – 50.1)	30.4	(28.3 – 32.7)
Livingston	53.3	(42.3 - 64.1)	35.3	(25.2 – 46.8)
Macomb	49.9	(44.1 – 55.7)	31.5	(26.2 - 37.3)
Monroe	39.8	(28.7 - 52.0)	24.5	(15.8 – 35.8)
Oakland	51.7	(47.2 - 56.2)	30.1	(26.0 - 34.5)
St. Clair	45.4	(34.4 - 56.9)	22.5	(14.8 – 32.7)
Washtenaw	48.6	(40.1 - 57.3)	34.7	(27.0 - 43.2)
City of Detroit	43.0	(37.0 - 49.2)	29.7	(24.3 – 35.8)
Wayne exc. Detroit	46.4	(41.6 – 51.3)	30.6	(26.3 – 35.2)
Region 2	50.3	(44.4 – 56.2)	32.3	(27.1 – 37.9)
Genesee	52.2	(44.9 - 59.4)	34.0	(27.6 – 41.1)
Lapeer <sup>c</sup>				
Shiawassee	43.6	(31.5 – 56.6)	28.0	(18.1 – 40.7)
Region 3	52.1	(44.1 – 60.1)	29.7	(23.0 – 37.3)
Jackson	59.4	(49.2 - 68.8)	39.1	(29.9 – 49.1)
Lenawee	41.8	(29.5 - 55.2)	15.7	(8.1 – 28.2)
Region 4	61.4	(56.0 – 66.6)	39.4	(34.1 – 44.9)
Barry-Eaton	63.1	(53.1 – 72.0)	45.6	(35.9 - 55.6)
Mid-Michigan <sup>d</sup>	60.3	(51.1 – 68.8)	37.9	(29.3 - 47.4)
Ingham	60.0	(52.1 – 67.4)	35.6	(28.3 – 43.5)
Region 5	50.4	(44.9 – 55.8)	34.6	(29.5 – 40.2)
Branch-Hillsdale-St.Joseph	45.1	(36.1 – 54.5)	30.0	(22.1 – 39.2)
Calhoun	42.8	(32.9 - 53.4)	29.9	(21.4 – 40.2)
Kalamazoo	59.7	(51.2 – 67.7)	41.7	(33.1 – 50.9)
Region 6	49.7	(42.3 – 57.2)	35.7	(28.9 – 43.2)
Van Buren-Cass	53.7	(42.9 - 64.2)	36.1	(26.4 – 47.2)
Berrien	46.8	(36.8 – 57.1)	35.4	(26.3 - 45.7)



Table 14 Cont'd					
Geographic Area	Ever Had	a Blood Stool Test <sup>a</sup>	Had a Bloo	od Stool Test in Pas 2 Years <sup>b</sup>	
	%	95% Confidence Interval	%	95% Confidence Interval	
Michigan Total	52.4	(51.0 – 53.8)	33.8	(32.5 – 35.2)	
Region 7	62.7	(58.9 – 66.3)	42.0	(38.2 – 45.8)	
Allegan	63.9	(52.4 - 74.0)	38.4	(28.0 - 50.0)	
Ionia <sup>c</sup>					
Kent	62.9	(58.3 - 67.4)	43.3	(38.6 – 48.1)	
Mid-Michigan <sup>d</sup>	60.3	(51.1 – 68.8)	37.9	(29.3 - 47.4)	
Ottawa	64.0	(54.9 – 72.2)	43.6	(34.9 – 52.7)	
Region 8	54.0	(48.0 – 59.8)	32.5	(27.3 – 38.3)	
District #10	52.1	(45.0 - 59.2)	33.8	(27.4 – 40.9)	
Muskegon	57.3	(46.8 - 67.3)	30.1	(21.6 – 40.3)	
Region 9	58.3	(53.0 – 63.5)	36.9	(31.9 – 42.2)	
District #2	54.0	(43.3 – 64.3)	34.2	(24.9 – 45.0)	
District #4	57.2	(45.1 – 68.4)	38.7	(28.0 – 50.6)	
Northwest Michigan	64.0	(54.2 - 72.7)	41.7	(32.2 – 51.8)	
Benzie-Leelanau <sup>c</sup>					
Grand Traverse	47.1	(33.7 – 60.8)	27.3	(16.6 – 41.6)	
Region 10	53.0	(47.0 – 58.9)	34.3	(29.0 – 40.1)	
Вау	61.1	(47.9 - 72.9)	44.9	(32.5 – 57.9)	
Huron <sup>c</sup>					
Saginaw	56.7	(47.5 – 65.5)	38.3	(29.9 - 47.4)	
Sanilac <sup>c</sup>					
Tuscola	41.2	(28.4 – 55.3)	23.7	(13.8 – 37.5)	
Region 11	56.6	(50.0 – 63.0)	36.8	(30.7 – 43.4)	
Central Michigan	52.2	(43.8 - 60.5)	33.4	(25.9 – 41.8)	
Midland	65.9	(56.1 – 74.5)	44.3	(34.7 – 54.3)	
Region 12 <sup>e</sup>	49.4	(43.0 - 55.7)	32.1	(26.4 – 38.4)	

Among adults aged 50 years and older, ...

a ...the proportion who said that they had ever used a blood stool test using a home kit.

<sup>...</sup>the proportion who reported that they had a blood stool test using a home kit in the last two years.

<sup>&</sup>lt;sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

<sup>&</sup>lt;sup>d</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.

Sample sizes were too small (< 50) to compute prevalence estimates by local health departments.



# by Community Health Assessment Region 2001, 2002, 2004 Michigan BRFS

Geographic Area	Ever Had a PSA Test <sup>a</sup>		
	%	95% Confidence Interval	
Michigan Total	79.1	(77.3 – 80.9)	
Region 1	79.2	(75.9 – 82.3)	
Region 2	81.1	(72.3 – 87.6)	
Region 3	82.4	(71.8 – 89.6)	
Region 4	79.0	(71.6 – 84.9)	
Region 5	75.6	(67.6 – 82.2)	
Region 6	70.6	(58.2 – 80.6)	
Region 7	82.7	(77.8 – 86.7)	
Region 8	78.7	(70.6 – 85.1)	
Region 9	78.6	(70.5 – 85.0)	
Region 10	83.3	(75.1 – 89.1)	
Region 11	82.8	(73.6 – 89.3)	
Region 12	69.8	(59.8 – 78.2)	

Note: Sample sizes were too small (< 50) to compute prevalence estimates by local health departments.

<sup>&</sup>lt;sup>a</sup> Among those men aged 50 years and older, the proportion who reported that they had ever had a prostate-specific antigen (PSA) blood test.



#### Table 16: Breast Cancer Screening Among Women Aged 40 Years and Older

#### by Community Health Assessment Region 2000, 2002, 2004 Michigan BRFS

Geographic Area	Had Clinical Breast Exam & Mammography in Last Year <sup>a</sup>		
	%	95% Confidence Interval	
Michigan Total	55.5	(53.9 – 57.1)	
Region 1	54.8	(52.1 – 57.4)	
Region 2	57.7	(51.2 – 63.8)	
Region 3	58.3	(49.3 – 66.8)	
Region 4	57.9	(51.5 – 64.1)	
Region 5	47.0	(40.8 – 53.3)	
Region 6	52.9	(44.5 – 61.1)	
Region 7	55.5	(51.3 – 59.6)	
Region 8	59.7	(52.7 – 66.4)	
Region 9	58.9	(52.5 – 65.0)	
Region 10	59.6	(52.5 – 66.4)	
Region 11	59.1	(51.4 – 66.4)	
Region 12	52.2	(45.0 – 59.3)	

Note: 2002 and 2004 data included diagnostic tests; data from 2000 excluded diagnostic tests. Note: Sample sizes were too small (< 50) to compute prevalence estimates by local health departments.

<sup>&</sup>lt;sup>a</sup> Among women aged 40 years and older, the proportion who had both a clinical breast exam and mammogram in the past year.



### by Community Health Assessment Region & Local Health Department

2000, 2002, 2004 Michigan BRFS

2000, 2002, 2004 Michigan BRFS			
Geographic Area	Had Pap	Test in Last 3 Years <sup>a</sup>	
	%	95% Confidence Interval	
Michigan Total	84.4	(83.4 – 85.4)	
Region 1	85.2	(83.6 – 86.7)	
Livingston	87.9	(78.3 - 93.6)	
Macomb	86.4	(82.4 - 89.5)	
Monroe	85.1	(76.2 - 91.0)	
Oakland	87.3	(83.9 - 90.0)	
St. Clair	83.6	(74.8 - 89.7)	
Washtenaw	82.2	(75.4 - 87.4)	
City of Detroit	84.5	(80.5 - 87.8)	
Wayne exc. Detroit	84.4	(80.6 - 87.5)	
Region 2	81.5	(76.8 – 85.5)	
Genesee	82.0	(76.6 - 86.4)	
Lapeer	69.0	(51.8 - 82.2)	
Shiawassee	90.3	(79.8 - 95.7)	
Region 3	87.5	(80.8 – 92.1)	
Jackson	86.3	(78.2 - 91.7)	
Lenawee	89.8	(74.8 - 96.3)	
Region 4	89.1	(85.4 – 91.9)	
Barry-Eaton	87.4	(78.8 - 92.8)	
Mid-Michigan <sup>b</sup>	86.1	(78.0 - 91.5)	
Ingham	89.5	(84.2 - 93.1)	
Region 5	83.2	(78.8 – 86.8)	
Branch-Hillsdale-St.Joseph	80.9	(72.8 - 87.0)	
Calhoun	77.6	(67.6 - 85.2)	
Kalamazoo	88.0	(81.4 – 92.5)	
Region 6	79.2	(72.6 – 84.5)	
Van Buren-Cass	83.8	(74.8 - 90.0)	
Berrien	75.2	(65.4 - 82.9)	

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Table 17 Cont'd			
Geographic Area	Had Pap	Had Pap Test in Last 3 Years <sup>a</sup>	
	%	95% Confidence Interval	
Michigan Total	84.4	(83.4 – 85.4)	
Region 7	86.3	(83.7 – 88.6)	
Allegan	80.4	(69.1 - 88.2)	
Ionia	86.5	(73.8 - 93.6)	
Kent	87.1	(83.9 - 89.8)	
Mid-Michigan <sup>b</sup>	86.1	(78.0 - 91.5)	
Ottawa	89.6	(83.7 - 93.6)	
Region 8	82.6	(77.5 – 86.7)	
District #10	79.2	(72.5 - 84.5)	
Muskegon	87.9	(79.0 - 93.4)	
Region 9	83.9	(79.4 – 87.5)	
District #2	72.1	(59.7 - 81.8)	
District #4	86.5	(77.0 - 92.4)	
Northwest Michigan	79.3	(68.9 - 86.8)	
Benzie-Leelanau	c		
Grand Traverse	94.6	(87.7 - 97.7)	
Region 10 <sup>d</sup>	84.0	(79.4 – 87.8)	
Region 11	80.3	(74.1 – 85.3)	
Central Michigan	81.7	(74.1 – 87.5)	
Midland	77.4	(65.8 - 85.8)	
Region 12 <sup>d</sup>	79.1	(72.5 – 84.5)	

Note: 2002 and 2004 data included diagnostic tests; data from 2000 excluded diagnostic tests. <sup>a</sup> Among women aged 18 years and older, the proportion who had a Pap test within the last 3 years.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the Regional estimate.

<sup>&</sup>lt;sup>c</sup> Sample size was too small to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate. (Sample size < 50) d Sample sizes were too small (< 50) to compute prevalence estimates by local health departments.